

IN THE SPECIFICATION

ABSTRACT

The invention includes catalysts Catalysts for polymerization of olefins, comprising (A) a transition metal compound, (B) an oxygen-containing compound, or a compound capable of reacting with a transition metal compound to form an ionic complex, (C) a specific compound such as a reaction product of triphenylmethyl alcohol and triisobutylaluminium compound of formula  $((R^1)_3-C-Y)_n-Z-(R^2)_{m-n} R^1_3-C-Y_{n-3} R^2_{m-n}$ , and optionally (D) an alkylating agent, and methods for producing olefinic polymers in the presence of such catalysts. The catalysts have the advantages of enhancing the polymerization activity and reducing the amount of the promoter such as oxygen containing compounds, etc. Using them, olefinic polymers can be produced efficiently and inexpensively.